there could be no doubt of the usual acceptation of the word "soffit," though there might be a question raised on it among "schoolmen." Mr. Robert Stephenson thought so too. After some deliberation,

The Chairman stated, the committee had considered the point in question, and it appeared to them that the word "soffit" had been used in the two different senses alleged, viz., to mean the whole of the interior surface of an arch, and the highest point of that surface, but considering that repeatedly, in Acts of Parliament, it had been used to signify the highest point, and also that no engineer had any doubt respecting that acceptation, they had decided that in this case the standing orders had been complied with.

Without any desire that a bill should be stopped simply on such a point as this, or questioning for an instant the decision of the committee, we cannot avoid saying that the architects were undoubtedly right, strictly speaking, and the engineers wrong, notwithstanding the remark made by one of the latter, that none but a *tyro* could suppose the word "soffit" meant any other portion than the top of the arch! Further, we deprecate the misuse, or want of precision in the application of architectural terms, as tending to lessen the efficiency of our nomenclature, which is at the best most meagre, lax, and unsatisfactory.

REMARKS ON MR. LUCAS'S RESTORATION OF THE PARTHENON.

BY PROFESSOR DONALDSON.

An ordinary meeting of the Royal Institute of Architects was held on Monday last, Mr. Tite, vice-president, in the chair, when Mr. R. C. Lucas read an essay on the Parthenon, with a dissertation on the restoration of this temple, now in the British Museum, including a brief review of the authorities consulted. Mr. Donaldson had previously intimated his intention of pointing out some defects in the restoration, looked at architecturally, and in consequence the meeting was more than usually numerous.*

Mr. Lucas's paper was exceedingly interesting and clever, and shewed that earnestness and devotion to the subject which always enlist sympathy and command admiration. As, however, the material points in it have been published by him in a pamphlet, and we have already spoken at some length of the models,† though chiefly as regards the sculpture, we will not attempt to give any outline of the paper now.

When Mr. Lucas had finished, Mr. Donaldson read the following remarks:—

You will doubtless, gentlemen, have been struck with the energy and fixedness of purpose with which Mr. Lucas has followed up his project of working out a reputation for himself by a restoration of the Parthenon, the fame of which, he hoped, would bring him favourably before the notice of the public, and no less pleased by the frankness with which he has communicated to us his ideas on the subject.

But there are other considerations of very great importance, which offer themselves in connection with so vast an undertaking. The boldness of the attempt must be justified by the qualifications of the enterprising artist. The taste and practical skill of the sculptor must be seconded by the learning of the antiquary, the professional experience of the architect, and the precision of the modeller. It seems beyond the range of human probability, that any thing less than a visit to this noblest of ancient monuments, and many weeks, nay months, devoted to the study of it on the spot, could enable any one, however gifted, to solve satisfactorily the many doubtful questions which hang over its complete restoration. We know that Palladio thrice visited Rome ere he ventured to publish his monuments of Roman architecture. Brunelleschi returned again and again to study the baths, the temples, and the ruins of that ancient city ere he felt satisfied to undertake the construction of the dome of Santa Maria dei Fiori, at Florence. Mazois repeatedly went to Naples to measure and draw the remains of Pompeii, in order to ensure a scrupulous and faithful record of the excavated buildings.

If Mr. Lucas had published his model and descriptions of it, as a restoration of the *sculptures* of the Parthenon, if the laudatory paragraphs, inserted by his admirers and friends in the public prints, had confined their eulogies to this, and had laid no higher claim than to the merit of having restored the work of the immortal Phidias, I should have left to others more competent than myself, and better acquainted with that sister art, to have examined into the proprieties of the restoration in that department. But the title-page of Mr. Lucas's own pamphlet, copies of which we owe to his friendly courtesy, states that one of the models exhibits *the temple as it appeared in its dilapidated state in the seventeenth century, and executed from the existing remains*, or *from authentic drawings*. The other *being an attempt to restore it to the fulness of its original beauty and splendour*. It is upon the fallacy of these statements, as regards its architecture, that I feel obliged at once to protest against the models—the one as not being a faithful representation of it in its dilapidated state, not executed from existing remains nor from authentic drawings—the other being inaccurate generally in its architectural details, and being *deficient*, instead of exhibiting the *fulness* of its original beauty and splendour.

I feel called upon to examine the subject thus specially, for the architectural errors are so contrary to the canons of the art, that the character of the profession is implicated, when we see that the Trustees of the British Museum give the stamp of approbation to these mistakes by purchasing the models and exhibiting them in juxta-position with the very marbles of the Parthenon itself. We must give them full credit for wishing to do full justice to the high reputation of Phidias; it is only to be regretted that, from parsimony or ignorance in themselves or those around them, they should have forgotten the claim of Ictinus to the character of the first architect of his own or any age, and as having produced in the Parthenon a work free from every defect, pure in every detail, graceful in every proportion.

In the model of the Parthenon in its dilapidated state, Mr. Lucas has erroneously represented on the architrave over the columns of the Posticum, the fillet caps over the guttæ. He has not placed them at the angles, and has continued them along the flanks. They now exist at the angles, and at equal spaces along the front, as shewn by Stuart, and there were none as usual along the flank.

Mr. Lucas has continued the antæ cap mouldings along the wall of the Posticum, and along the flank wall of the cella, in both which positions they never existed. Mr. Lucas has represented cornices on the inner face of the cella wall where they do not exist, nor according to the most probable mode of restoration, ever could exist.

These introductions are totally at variance with the drawings of Stuart, and cannot possibly be extant in any other authentic drawings as stated in the title-page of the pamphlet.

I must now venture to allude to the restored model. In the first place, it is less accurate as regards the steps, than that of the ruined temple. In the latter there are only three, in the former four. Upon referring to my own studies made on the spot, I find three steps of marble, and below the lowermost a slab of the same height and about the same projection of stone, and thus specifically stated in my sketch. There is then a much wider slab of stone, and a drop beyond of 3 feet 4 inches. It appeared conclusive to my mind, that the stone slab was a portion of the pavement of the area around the temple, which was laid with slabs of stone, the upper surface being level with the upper face of the stone slab under the third marble step. In fact, it would have looked incongruous to have had one step of stone and then three of marble. Besides which we have the testimony of Vitruvius, who says, Book III. c. 3. "The number of steps in front *should always be odd*, since in that case the right foot, which begins the ascent will be that which first alights on the landing of the temple." We know that our great master borrowed all his canons from the Greeks, and that the superstitions of the ancients had a common origin and a common acceptation.

The restored model shews no traces of the plinth which existed between the lower parts of the columns of the Posticum, and of which there are indisputable signs in the Parthenon. This plinth, which was 9 feet 1 inch high, and half as wide again as the centre fluting, received the standards of the metal grating which inclosed the intercolumniations up to the summit of the capitals, as is ascertained by the mortice holes still existing in the antæ. This metal work was for the purpose of giving security to the Posticum, as within it were exposed to public view many of the votive offerings of beauty and value, the riches of the temple, and being placed within the metal railing, they were prevented being injured by accident or purloined by the evil disposed. This grating was probably of bronze gilt, and many Roman bas-reliefs offer authority for a restoration.

The next inaccuracy to which I wish to call attention, is the doorway. The old aperture had been narrowed long since, either by the Venetians or Turks, by the introduction of slabs in irregular courses; beyond these slabs the wall is perfectly plain. Reasoning from the magnificence and importance of the Parthenon, which would be evidently deficient in effect if the doorway were a mere square aperture; reasoning from the analogy of the Erectheum, which has a magnificent doorway, although an edifice of less importance than the Temple of Minerva, and reasoning from the evidence to be found on the apertures of the Propylea, which had evidently bronze dressings, I have little hesitation in stating my opinion, that the dressings of the Parthenon were of bronze, and that the model is singularly unfortunate in having consoles or trusses, which support nothing, are accompanied by no corresponding embellishment, and are contrary to all reason, propriety, and example. I have already alluded to the continuation of the mouldings of the antæ caps, retained in the restoration, and quite contrary to fact. We now come to the interior of the cella, and considering the complexity of the opinions offered by Messrs. Pitakis, Finlay, and others, who were consulted by our author, it is not surprising that he should have found himself involved in a maze of difficulty. It appears that Mr. Cockerell, in the seventh volume of the Museum Publications, has restored the interior with two orders of columns; the lower are Corinthian, the upper are Doric. All the rules of the art, all analogy, and all probability have run counter to this daring arrangement. In the temples of Pæstum we find a double tier of columns, one over the other, to support the roof of the hypethrum, both Doric; but the casual statement of Mr. Inwood, that a portion of a Corinthian capital was brought by him from the Parthenon, and a similar fragment discovered in the Temple of Apollo Epicurius, at Bassæ, near Phigalia, seem to have been considered sufficiently grave authority for the introduction of the Corinthian, as one of the inner orders of the Parthenon. Assuming at once that Mr. Inwood got it from the Parthenon—How did it get there? Was it there originally? Had any other traveller—the precise Spon and Wheller, or the laborious Stuart and Revett ever seen it? Among the strange metamorphoses by Venetian, Turk, and Greek, may it not have been converted to the purpose of construction from some stray fragment beyond the verge of the Parthenon, as being lighter and more easily applicable for their purpose than the ponderous blocks of the construction of Ictinus? May it not have been purposely placed there by some wily Greek to give it additional value in the eyes of one, who was eager for any fragment of Attic art, and profusely liberal to every one who contributed to his collection? The introduction of the Corinthian order into the Parthenon involves so many serious questions in the art, that its adoption must rest upon some more authentic proof than that which accompanied this questionable fragment. But let us assume that it came from the Parthenon, and was always there; is it too much to require the restorer to pause and consider whether this may not have been a fragment from some ob-

* It gives us pleasure to mention, that Professor Donaldson has just been elected a member of the Royal Academy of Sciences and Belles Lettres, at Brussells.

† See pp. 583 and 619, Vol. III.